Emission Control System Lowers School Bus Diesel Emissions

Study shows that Donaldson products reduce interior emissions by more than 50 percent

An independent research report shows interior air pollution from diesel school buses can be cut by 54 percent or more with the addition of devices such as Diesel Oxidation Catalyst (DOC) mufflers combined with Crankcase Filtration Systems (CFS) and exhaust soot filters. Conducted by the University of California, Riverside's College of Engineering Center for Environmental Research and Technology, the study examined newer emission-control equipment to gauge its effectiveness in reducing particulates in the interior of a school bus. The study measured the diesel exhaust that students are exposed to on a school bus retrofitted with emission-reduction equipment, compared to a conventional school bus with no emission controls.

"*The study shows we can install new emission control technology on existing diesel buses to significantly reduce emissions,*" said Ted Angelo, director of emissions product development, Donaldson Company. "*By retrofitting conventional buses, school districts can greatly reduce emissions, without making a major investment in new fleet vehicles. Research like this demonstrates that systems like Donaldson Spiracle(tm) can play a key role in helping reduce emissions found in school buses. It also demonstrates the need to consider all sources of emissions from engines, not just what comes from the tailpipe.*"

The UC-Riverside study also found that the Donaldson DOC muffler combined with a Spiracle CFS reduced interior particulate concentrations from 54 percent to 62 percent. According to the study, the Donaldson Spiracle CFS reduced interior particulate concentrations by an additional 20 percent when added to an engine equipped with a diesel-particulate filter. The concentration reductions revealed by the UC-Riverside study are consistent with other emission testing results, showing that retrofitting buses with newer emission-controls technologies can significantly decrease emissions. The Spiracle CFS also enables users

Donaldson

of older medium- and heavy-duty vehicles to retrofit their engines while reducing oil consumption.

A Spiracle CFS helps reduce crankcase blow-by emissions through a two-stage coalescing process while maintaining crankcase pressures. Mounted between the engine breather port and air intake system, the Spiracle CFS helps reduce unpleasant in-cab fumes and keeps engine enclosures free from oil film deposits by efficiently filtering and routing blow-by gases back to the air intake. The retrofit system can be used across a broad spectrum of diesel engine vehicles, including medium- and heavy-duty trucks and buses, light vehicles such as pickup trucks, off-road equipment and industrial equipment.

The DOC muffler/Spiracle filtration system meets the U.S. Environmental Protection Agency's (EPA) Voluntary Retrofit Program warranty requirements and has received the California Environmental Protection Agency's Air Resources Board (ARB) Level 1 verification. For additional information, contact Donaldson Company at 1-866-675-2847, or visit the company's Web site at www.donaldson.com.

Donaldson.

Donaldson Company, Inc.
Minneapolis, MN
55440-1299

www.donaldson.com

North & South America
866-675-2847

F111167 (8/04)